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The Self-Perceptions of Adolescents With Diagnosed Learning Disabilities

Julie Ann Larson

THE SELF-PERCEPTIONS OF ADOLESCENTS WITH DIAGNOSED LEARNING DISABILITIES

by
Julie Ann Larson

Bachelor of Science, St. Cloud State University, 1973

Master of Science, St. Cloud State University, 1981

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This Dissertation submitted by Julie Ann Larson in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

Beverly Brekke
(Chairperson)

Douglas Peters

John A. Bebula

Deanna L. Strackbein

Myrna R. Olson

This Dissertation meets the standards for appearance and conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

O. William Johnson 7/19/88
Dean of the Graduate School

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Signature Julie Einarson

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ABSTRACT

Problem

The purpose of this study was to examine the self-perceptions and knowledge of adolescents diagnosed as learning disabled have regarding their learning disability. It investigated the terminology used by adolescents in describing their learning disability. The study looked for discrepancies between the students' definitions of their learning disability as found on their Individual Education Plans. Lastly, it examined the strategies used by the students when they encountered learning problems.

Procedure

The research population for this study was comprised of 40 high school students enrolled in two midwestern public high schools. All 40 students had been identified as learning disabled by their school district's criteria. The school district's criteria met the federal guidelines as outlined in Public Law 94-142. To qualify for this study, the learning disabled students all had an Individual Education Plan on file and all had received direct, individualized instruction. All participants completed a 68-item questionnaire developed by the writer. The questionnaire consisted of 5 questions pertaining to students' knowledge of their disabilities and 63 statements that were characteristic of various learning disabilities derived from the research literature and the writer's experience as a learning disabilities practitioner. Students were to select items that described their learning disability. This instrument was used as a

probing instrument, and students were interviewed regarding their responses.

The study was essentially qualitative in nature. The responses were analyzed to determine how much knowledge students had about their learning disability, and how the labels used to identify their learning disability compared to the diagnosis on their Individual Education Plan.

Conclusions

1. The learning disabled students interviewed perceived their difficulties in terms of specific school problems they encountered academically. They did not relate their academic problems to characteristics found in their learning disability.

2. Students did not use educationally descriptive terminology. They described their disabilities in terms of difficulties they encountered in their classes.

3. A significant number of learning disabled students used metacognitive strategies in reading.

4. Students must be taught how to use cognitive strategies to become active learners.

5. Students with learning disabilities must be counseled about their handicaps.

CHAPTER I

INTRODUCTION

Adolescence

Among the most widely accepted ideas in the behavioral sciences is the idea that adolescence is a period of disturbance for the child's self-image or self-perception. It has been characterized as one of storm and stress. Erikson (1959) views it as a time of identity crisis in which a child struggles for a stable sense of self.

Adolescence is a critical period with respect to the development of self. An increased ability to think logically and abstractly ensures a more coherent and well-articulated view of self while richer social experiences and greater knowledge ensure a more complex social construction of the adolescent's own identity (Piaget, 1968).

Adolescence may be defined as the period within one's life span when most of a person's physical, psychological, and social characteristics are in a state of transition from what they were in childhood and to what they will be in adulthood. Adolescence is a period of life characterized by several major changes that bring the person from childhood to adulthood (Grinder, 1975).

The most obvious sets of changes that an adolescent goes through are anatomical and physiological ones. The physical, psychological, and emotional changes are complicated by the fact that the person is also undergoing cognitive changes. New thought capabilities come to characterize the adolescent (Muuss, 1975).

For both psychological and sociological reasons, the major focus of the adolescents' concerns become the adolescents themselves. One way to know adolescents is to try to understand their experiences and perceptions of self.

Self-Perceptions

What is the self and why are people interested in it in the first place? The desire to understand oneself and others may be a reflection of each person's existential aloneness, the autonomy achieved developmentally, and the awareness that each of us is a separate being. Also important is the sociocultural ethos of our highly individualistic times and society (Offer, Ostrov, & Howard, 1981). For adolescents in particular the desire to know the self is tied up with learning to relate to others while acquiring a sense of separateness and autonomy, the quest to achieve what Erikson (1950) calls "identity."

There are many definitions of self. Words such as self-concept, self-image, and self-perception have been used interchangeably to refer to a phenomenological organization of individuals' experiences and ideas about themselves in all aspects of their lives. Rosenberg (1979) defined self-image as "the totality of the individual's thoughts and feelings having reference to the self as an object" (p. 7). Jacobson (1964) used the term self to mean "the unconscious endopsychic representations of the bodily and mental self in the system ego" (p. 21). He emphasized the emotional experiences of self, the direct awareness of inner experiences.

Grinker (1975) believed the self is a system that fuses a complex array of identifications in interactions with both social and self recognition. He stressed that feelings about the self and others are

grounded in one's early interpersonal experiences.

The Learning Disabled Adolescent

Learning disabled adolescents are faced with the difficult task of understanding themselves and understanding their learning disabilities. The learning disabled adolescent may suffer from a variety of learning disabilities, each of which is complicated and difficult to fully comprehend. The term learning disability refers to a handicapping condition associated with the inability of a student to perform school tasks at an expected level. Some 40 different terms have been used to describe this condition. Despite the differing foci that appear in the literature, there does exist a core agreement among different professionals that includes the following four elements (Woodward & Peters, 1983): (a) There should be a significant discrepancy between expected and actual development. Some authorities state that learning disabled students at the secondary level must lag two or more years behind grade placement in basic math and language arts skills. (b) The learning disability should be specific and not a correlate of other primary handicapping conditions such as mental retardation, emotional disturbance, sensory impairment, or cultural disadvantage. (c) The deficits must be of a behavioral nature: impairments of thinking, conceptualization, memory, speech, language, perception, reading, writing, spelling, arithmetic, and related abilities. (d) Learning disability programs at the secondary level should be reserved for students who have failed to master the academic skills usually acquired during elementary school.

As an experienced learning disabilities teacher the writer has come to know that learning disabled adolescents go through a very

difficult time physiologically and socially. It has often been frustrating to work with professionals who do not understand learning disabilities. It seems essential that professionals must understand what learning disabilities are and how they are remediated. They must know how secondary schools are organized, what their goals are, and have knowledge about the world of adolescents. It is important for professionals to assist learning disabled adolescents in understanding their learning disabilities. Learning disabled adolescents behave not in accordance with reality but with their perceptions of reality. How learning disabled students feel about themselves and their disability is everything, for all they ever do or aspire to do will be predicated on that all-important concept that is the self-image or self-perception. What learning disabled students do in high school will be based upon the knowledge they have with regard to their learning disability and their self-perception. The self-perception is one's conception of the sort of person one is and the problems one has.

Most of the self-perceptions that adolescents have about themselves have been formed unconsciously from past experiences (their successes and failures) and the way people react to them. Learning disabled adolescents achieve their self-perceptions from parents, friends, and from the way their teachers have included them in their educational plans.

Purpose of the Study

The purpose of this study was to examine the self-perceptions of learning disabled adolescents. Specifically it was of interest to determine what kind of knowledge adolescents had about their disability. The following research questions were written for the

purpose of obtaining this information.

1. What perceptions do adolescents diagnosed as learning disabled have about their disabilities?

2. What terminology do learning disabled adolescents use to describe their disabilities?

3. What metacognitive skills or strategies do learning disabled adolescents use?

4. Are the labels used by learning disabled adolescents the same as those used on their individual education plans?

It was the writer's hope that the data gathered to answer these questions would be useful to learning disabilities teachers. Learning disabilities teachers could use this information as a basis for teaching learning disabled students about their disabilities.

Delimitations

This study was conducted within the following delimitations: It was confined to a sample of high school sophomores, juniors, and seniors attending two of the Grand Forks, North Dakota, public high schools during the spring semester of 1986. This sample of students consisted only of students diagnosed as learning disabled and having an Individual Education Plan (IEP).

Definitions

Learning disability. The term "children with specific learning disabilities" means those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such disorders include such conditions

as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such terms do not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps; of mental retardation; of emotional disturbance; or environmental, cultural, or economic disadvantage.

Individual Education Plan (IEP). This term refers to a written document stating students' present levels of educational attainment, annual instructional goals, short-term instructional objectives, specific educational services to be provided, and specific criteria and evaluation procedures which will be used to determine whether instructional objectives have been achieved.

Adolescence. This period extends from the onset of puberty (at about 10 or 11 in girls, 12 or 13 in boys) to the assumption of full adult responsibilities: physical, social, legal, and economic.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of this chapter is to present a review of the literature related to the concerns of this investigation. Since this study was designed to explore the self-perceptions of adolescents diagnosed as learning disabled, the literature review is presented in four major sections: (a) self-image, (b) attribution theory, (c) metacognition, and (d) the learning disabled adolescent in school.

Self-image

Development of self-image. Adolescence, according to Erikson (1968), is the critical period in the life cycle for the resolution of the psychosocial crisis of identity. In late adolescence, individuals are confronted with the crisis, or developmental challenge, of forming a unique sense of identity. This identity potentially meets both their need for self-fulfillment and for recognition from other members of a society whose values they share (Leadbeater & Dionne, 1981).

According to Erikson (1950), each state of ego growth is marked by a modal crisis which, for adolescents, he labels "identity vs. role confusion." As he describes it, the adolescent's effort to forge an identity involves the ego's ability to integrate the demands of the libido, the abilities developed out of the natural capabilities and the various opportunities offered by available social roles. Thus, Erikson charted the way for moving beyond Freud's intrapsychic model to one which he labeled psychosocial.

Like Erikson, Conger (1973) has a description of ego identity. He describes ego identity as that state where one perceives self as a distinctive individual, that is distinct from others, but also integrated in that a continuity exists between what I am today and what I was yesterday. However, ego identity encompasses identification with something apart from self--such as meaningful others as well as continuity of self.

Between about 15 and 18 years of age the adolescents tend to be keenly concerned with their self-image. What am I like? How good am I? What should I, or might I, become? On what basis shall I judge myself? Many adolescents are consumed with questions of this sort. There are several reasons for heightened awareness of the self-image during this period of development (Rosenberg, 1965).

One reason for a heightened awareness of the self-image is that adolescence is a period of unusual change. Rapid physical changes abound and psychological changes are taking place. New interests, attitudes, and values come to the forefront. A second factor that comes into play in late adolescence is the need for making major decisions. For example, individuals must give serious thought to their occupational choice. When they are faced with an urgent decision, and when a major basis for this decision is their view of what they are like, then the self-image is likely to move to the forefront of attention. Thirdly, late adolescence is a period of unusual status ambiguity. Society does not have a clear set of expectations for adolescents. In some ways they are treated like children and in other ways they are given the status of adults. They are thus unclear about their social duties and responsibilities,

just as they are unclear about their social rights and privileges. This ambiguity is accentuated by the fact that both experiences of the past and events of the future influence the self-image. It is suggested that where such sources of ambiguity exist, the concern with the self-image is likely to be heightened (Rosenberg, 1965).

Definitions of self-image. But what is a self-image? Often it is treated as a rather mysterious and indefinable entity. Rosenberg (1965) conceived of the self-image as an attitude toward an object. He defined the attitude as including facts, opinions, and values with regard to the self, as well as a favorable or unfavorable orientation toward the self.

There are other interpretations about the self-image. Simmons and Rosenberg (1975) developed three dimensions of the self-image. Self-consciousness, first of all, refers to the salience of the self to individuals. In many situations, the self becomes so prominent, the individuals so aware of what others are thinking of them, that interaction becomes extremely uncomfortable. The second dimension of the self-image is stability. If individuals are unsure of what they are actually like, then they are deprived of an important basis for action and decision. The third dimension is self-esteem or individuals' global positive or negative attitude towards themselves.

In contrast, Offer and Ostrov (1984) conceptualize the self-image as consisting of five selves. They include the psychological self, the familial self, the social self, the sexual self, and the coping self.

Lastly, Rosenberg (1965) classifies the self-image in terms of the following universal dimensions:

> Thus, if we can learn what the individual sees when he looks at himself (his social statuses, roles, physical characteristics, skills, traits and other facets of content); whether he has a favorable or unfavorable opinion of himself (direction); how strongly he feels about his self-attitudes (intensity); how important the self is relative to other objects (importance); whether he spends a great deal of time thinking of what he is like--whether he is constantly conscious of what he is saying or doing--or whether he is more involved in tasks or other objects (salience); whether the elements of his self picture are consistent or contradictory (consistency); whether he has a self attitude which varies or shifts from day to day or moment to moment, or whether, on the contrary he has a firm definite picture of what he is like or vague, lazy, blurred pictures (clarity)--if we can characterize the individual's self picture in terms of these dimensions then we would have a good, if still incomplete, description of the structure of the self image. (p. 7)

Attribution Theory

Definition of learning disabilities. The definition of learning disabilities has been, and continues to be, a source of controversy and frustration among educators, parents, and legislators. One reason the definition remains elusive has been the narrow perspective of childhood deviance which has dominated the field of learning disabilities. By and large, efforts to characterize the learning disabled have focused on cognitive processes (i.e., attention, perception) or academic retardation at the expense of social interpersonal factors. Disregarded as factors which might account for or contribute to children's failure to learn are motivational and personality states as well as the impact of significant others on the learning disabled. Whether the social difficulties of the learning disabled influence the identification and diagnosis of children as learning disabled, or represent the outcome of the experience of school failure, is not known (Bryan & Pearl, 1982).

In 1981 the National Joint Committee for Learning Disabilities (NJCLD) agreed to propose a new definition of learning disabilities:

> Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g. sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g. cultural differences, psychogenic factors), it is not the direct result of those conditions or influences. (Hammill, Leigh, McNutt, & Larsen, 1981, p. 336)

Definition of attribution theory. Attribution theory represents one approach to understanding learning disabled adolescents and their motivational patterns. Students' willingness to put forth the effort required to improve academic performance and their feelings about academic success and failure are determined, in part, by how they interpret the causes of their own academic successes and failures (Tollefson, Tracy, & Johnson, 1982). Grimes (1981) describes attributions as the internal explanation individuals devise to explain their success or failure at a task. Attribution theory examines children's beliefs and expectations about their performance in success or failure situations. Like Grimes, Bar-Tal (1978) described attributions as the "inference that an observer makes about the causes of behavior, either his or another person's" (p. 259). Attribution theory, therefore, is concerned with causal perceptions.

Factors in attribution theory. Attribution theorists hypothesized that people use the following four factors to explain success and failure in achievement-related settings: ability, effort, luck, and task difficulty. The ability factor includes intelligence and

knowledge as well as the personality and attitudes that affect what individuals can do. Effort is defined as the exertion expended by individuals to accomplish a task. Luck is defined as a transient environmental condition involving chance and/or opportunity. Ability is a stable internal factor, while task difficulty is a stable external factor. The unstable factors include effort and luck (Tollefson et al., 1982). According to attribution theory, children's reactions to failure appear related to whether they attribute their lack of success to factors within or beyond their own control. Internal locus of control refers to potential factors which individuals have power to change. Generally, effort or attitude attributions toward the task are factors which individuals can change. On the other hand, external locus of control relates to factors which individuals cannot change. Ability level, IQ, luck, and task difficulty are types of external locus of control factors (Grimes, 1981).

Definition of learned helplessness. Learned helplessness refers to the belief that achievement outcomes are outside the control of individuals and that, for this reasons, exerting effort to succeed is pointless. Learning disabled students who believe that academic success or failure is unrelated to personal effort will not be motivated to attempt an academic task or to persist once the task becomes difficult. Children who learn to be helpless do not attempt tasks at which they cannot succeed. The results of Tollefson et al.'s 1982 study suggested that helplessness in academic tasks is an attitude held by many learning disabled students. They have been taught that effort is related to success in school and can verbalize this socially desirable response when asked to explain that the achievement task and

the achievement outcome are outside their control. Therefore, this concept has been used to explain the extremely negative reactions some students display in failure situations.

The term "learned helplessness" was first used by Seligman, Maier, and Geer (1978) to refer to the learning or perception of independence between the elicited response of individuals and the presentation and/or withdrawal of aversion events.

Dweck and Reppucci (1973), Dweck (1975), and Diener and Dweck (1978) all make reference to learned helpless children as children who overreact to negative feedback and give up after failure. Dweck (1975) theorized that children's continued persistence with a task at which they have failed is related to attributions or internal statements they make to themselves about why they failed. Children who perceived a lack of independence between what they do and what happens to them often react by giving up and/or lowering their performance level.

Much of the research done on learned helplessness has focused on individuals' beliefs about their personal control over outcomes. Researchers in the area of learned helplessness assume that children make an evaluation about their performance before, during, and after a task. Prior to undertaking the task, children have a generalized expectancy of how they will perform, based on past performances in the same general area. During the task, students may judge the difficulty of the task and their success rate. Attributions to explain their success ("I'm good at this") or failure ("This is too hard for me") may begin. After the task, children compare their initial expectations with their actual performance and revise their perceptions of personal control over their environment to either

maintain their success or rationalize their failure (Grimes, 1981).

There is considerable evidence that individuals who have high self-concepts of ability and who attribute success to ability and failure to a lack of effort are more likely to choose achievement activities, more difficult tasks, and be persistent when tasks are difficult (Kukla, 1972, 1978). In contrast, children who attribute success to effort or luck and failure to a lack of ability expect to fail on future tasks (Nicholls, 1976). They show a lack of persistence or "learned helplessness" when confronted with difficult tasks, even when success is within their capabilities (Dweck & Reppucci, 1973). Bryan and Pearl (1982) questioned whether the negative self-concepts found in learning disabled children and the "strategy production deficits" or the current literature might reflect "learned helplessness" attributions made by the learning disabled.

Studies of learning disabled adolescents. Bryan and Pearl (1982) conducted a series of studies to determine whether learning disabled students' beliefs about the causes of success and failure would differentiate them from normally achieving youngsters and thus indicate that the learning disabled hold maladaptive attributions.

Their first study indicated that learning disabled and nondisabled students differed in their perceptions of control over positive outcomes. The learning disabled were more external in comparison to the nondisabled on their scales. There were no group differences for perceptions of control over negative outcomes. Thus, while the learning disabled and nondisabled accept about the same degree of responsibility for negative events, the learning disabled perceive themselves to have less control over success (Bryan & Pearl, 1982).

In their second study Bryan and Pearl examined students' perceptions of the importance of effort, ability, task difficulty, and luck for academic, social, and neutral domains with successful and unsuccessful outcomes. The results for effort indicated that nondisabled children believed that not trying hard enough was a greater cause of their failure than did the learning disabled, while no group differences resulted in ratings of the importance of effort when successful (Bryan & Pearl, 1982).

On task difficulty, the learning disabled were more likely to believe that their successes occurred because tasks were easy than that their failures occurred because tasks were hard. The nondisabled rated task difficulty of equal importance for success and failure (Bryan & Pearl, 1982). These results for task difficulty suggested that the learning disabled, in comparison to their classmates, are less likely to believe they can influence outcomes through effort, and that these perceptions about the causes of failure apply to areas other than the academic domain of reading. In addition, they believed that if they do well it is because tasks are easy but do not blame task difficulty for causing their failure. They appeared to be rather pessimistic about their abilities to influence outcomes and may have felt dependent on the good will of others to give them easy tasks (Bryan & Pearl, 1982).

Bryan and Pearl's third study in 1982 questioned students about what they were good at in school and their rationale. Also they asked the students what things were hard in school and why. The attributions made by children for their strengths found that the older learning disabled subjects emphasized liking the subjects or the teacher as

important factors, and attributed weaknesses to a lack of facilitating behaviors like paying attention or following directions. Nondisabled students were more likely to attribute strengths to ability than the learning disabled. The results suggested that the learning disabled are more external in their attributions for success, perceiving "liking the teacher" and "the subjects" as important factors. In addition, the learning disabled do perceive themselves as having greater difficulties in those cognitive processes necessary for academic achievement (Bryan & Pearl, 1982).

In summarizing their three studies, Bryan and Pearl (1982) indicated that the learning disabled were prime candidates for attribution retraining. They did not take personal credit for success and they felt largely responsible for failure.

Attribution retraining. Tollefson's 1980 research reports the effects of an attribution retraining program intended to teach learning disabled adolescents to attribute achievement outcomes to the internal factor of effort rather than to a learning disability or to the external. Her research was concerned with learning disabled adolescents' perception of personal (internal) and environmental (external) causality as explanatory constructs in their academic success and failure. The relationship between attributions, expectancy of success, and self-esteem was the focus of the research.

The learning disabled adolescents in the sample did not significantly increase their effort attributions after participation in an effort attribution retraining program. They did, however, score higher in self-esteem. A possible explanation for the positive self-esteem scores was that the learning disabled students had learned

both factors of luck or task difficulty in the resource room. Effort attributions enable students to accept responsibility for their achievement outcomes in ways that enhance their self-esteem. Effort for success brings a sense of pride and accomplishment; effort for failure permits the student to maintain a positive self-image because failure is explained by lack of effort, something that can be changed, rather than lack of ability, something that cannot be changed (Tollefson, 1980).

Metacognition

Definitions of metacognition.

In the June 1979 issue of Plain Talk about Children with Learning Disabilities (cited in White & Denny, 1983) the National Institute of Mental Health pointed out that learning disabled students need to be taught how to learn. Learning how to learn is metacognition. It involves enabling the mind to search out patterns, to analyze and solve problems, to summarize results, to check conclusions, and to establish associations. It includes learning strategies for receiving, processing, storing, and recalling information. It requires skills in self-questioning as well as awareness of failure.

Flavell (1976) gave another definition of metacognition:

> Metacognition refers to one's knowledge concerning one's own cognitive processes and products or anything related to them, e.g., the learning-relevant properties of information or data. For example, I am engaging in metacognition (metamemory, metalearning, metaattention, metalanguage, or whatever) if I notice that I am having more trouble learning A than B; if it strikes me that I should double-check C before accepting it as a fact; if it occurs to me that I had better scrutinize each and every alternative in any multiple-choice type task situation before deciding what is the best one; if I sense that I had better make a note of D because I may forget it[.]. . . Metacognition refers, among other things, to the active monitoring and consequent regulation and orchestration

> of these processes in relation to the cognitive objects or data on which they bear, usually in the service of some concrete goal or objective. (p. 232)

The skills of metacognition are those attributed to the executive in many theories of human memory and machine intelligence: predicting, checking, monitoring, reality testing, and coordinating and control of deliberate attempts to study, learn, or solve problems (Brown, 1978).

A very basic form of self-awareness is the realization that there is a problem, of knowing when you know and when you do not know. If students do not recognize that they failed to understand an important point, they cannot initiate a course of action to rectify the gap in knowledge. The problem of ascertaining the state of one's own ignorance or enlightenment is one of metacomprehension. For example, understanding instructions would be a case of comprehension of a message, whereas knowing that one had understood (or not) would be an example of metacomprehension (Brown, 1980b).

> Part of being a good student is learning to be aware of one's own mind and the degree of one's own understanding. The good student may be one who often says that he does not understand, simply because he keeps a constant check on his understanding. The poor student who does not, so to speak, watch himself trying to understand, does not know most of the time whether he understands or not. Thus the problem is not to get the students to ask us what they don't know; the problem is to make them aware of the difference between what they know and what they don't. (Holt, 1964, pp. 28-29)

Not only are efficient students capable of checking what they know or could deduce at any point, but also they know there are certain categories of information that are essential for them to complete a task effectively (Brown, 1980a).

Metacognition, then, refers to an awareness of and an ability to capitalize on one's own self-knowledge and thought processes as these are applied to some specific task. It is that general knowledge which

guides readers in monitoring their comprehension processes through the selection and implementation of specific strategies to achieve some predetermined goal (Alvermann & Ratekin, 1982).

Factors within metacognition. In an effort to separate two phenomena associated with metacognition, Baker and Brown (1980) conceptualized metacognition into two clusters. The first cluster is concerned with the learner's awareness of an incompatability between available knowledge and the complexity of the task at hand. The second cluster of activities is concerned with the active monitoring of one's own cognitive processes. Directly related to metacognitive awareness of one's limitations and effective monitoring is the deployment of appropriate strategies. According to Baker and Brown, the choice of strategies will vary depending on the goal.

Baker (1982) offers yet another way to analyze metacognition. He also describes two components: (a) an awareness of what skills, strategies, and resources are needed to perform a task effectively; and (b) the ability to use self-regulatory mechanisms to ensure the successful completion of the task, such as planning one's ongoing activities, checking the outcomes of one's efforts, and remediating whatever difficulties arise.

Metacognition and learning disabilities. Metacognition is becoming a focus of research on children identified as learning disabled. An important reason for this trend is that metacognition is considered a possible explanatory construct for why many disabled youngsters experience difficulty in certain academic settings (Tollefson, 1980). If learning disabled children are deficient in certain metacognitive apsects of problem solving, these deficiencies

may be remediated through instruction.

Many descriptions of learning disabled youngsters sound very much like the description of helpless people given by Dweck and others. Recent studies have, in fact, shown that learning disabled children tend to have the following perceptions. They have little internal control over success and failure; failures are due to lack of ability, while successes are due to factors beyond personal control; chances of initial success are relatively low, and future success following a successful experience is tenuous at best (Butkowski & Willows, 1980; Pearl, Bryan, & Donahue, 1980). Lack of success on a given task communicates to learning disabled students that they have cognitive limitations, whereas students wihout learning disabilities engage in alternative strategies or reanalysis of a task to perform better in future attempts at that task (Pearl, Bryan, & Herzog, 1981).

Self-perception of ability. Students' personal beliefs, motivations, and affect clearly influence the ways that students address and solve problems. Research on self-esteem, going back to the classic study by Sears (1940), has demonstrated a clear link between individuals' judgments of their competence and their actual performance on school-related tasks. The implications for metacognitive theory and methodology are that attention must be given to personal variables such as intentions, attributions, expectations, and beliefs about one's competence and learning disabilities. These variables might be especially important for learning disabled because these students have frequently experienced long periods of relative failure in school (Hagen, Barclay, & Newman, 1982).

One area in which these variables may influence how students approach a problem focuses on self-perception of ability and the belief that a problem is solvable, given effort. Markus (1977, 1980) has proposed a "self-schemata" which summarizes past experiences and determines what is noticed, learned, remembered, and inferred about oneself in the future. Self-schemata represents knowledge about one's own social and cognitive features. Both adults and children form self-schemata concerning their capabilities and limitations, their degree of personal control over academic achievement, their reasons for success and failure at different tasks, and their expectations for the future. With age, the perceptions become more accurate, realistic, and stable (Hagen et al., 1982). Self-schemata can be viewed as actually becoming organized into individuals' implicit "theory of intelligence" (Dweck, 1981). The students' views of themselves as learners are the important forms of metacognition.

Research has already established relationships between self-perception, achievement motivation, and academic performance. According to Weiner's theory of motivation (1972, 1979; Weiner, Russell, & Lerman, 1979), causal attributions are critical determinants of future expectancy, persistence, and various affective responses. Students' interpretations of reality may be better predictors of future expectancies and course choices in school than past reality itself (e.g., course grades) (Parsons, 1981). A self-worth theory of achievement behaviors (Covington & Beery, 1976) has stressed the importance of attributions and expectancies in explaining fear of school failure and resultant indifference to learning (Nicholls, 1979).

Little research has dealt directly with the functional relationships between academic self-perceptions and subsequent motivation and performance among learning disabled students. The most relevant work is that on learned helplessness (Dweck & Goetz, 1978; Dweck & Licht, 1980). Learned helplessness--the perceived inability to overcome failure--results from inaccurate attributional patterns and expectations and leads to deterioration in cognitive performance. After experiencing failure, the "helpless" students engage in one sort of metacognitive activity, namely nonproductive thoughts about their lack of ability. The students who are not "helpless," however, deal with failure in a very different manner. The students engage in the metacognitive activities of self-monitoring, self-instruction, and reanalysis of the task at hand--all of which are aimed at improving performance in subsequent attempts at problem solving (Diener & Dweck, 1978, 1980).

The students who have had difficulty in learning may underestimate their abilities, attribute academic outcomes to reasons that are not necessarily accurate, and subsequently expect to do poorly in future learning situations. These self-perceptions may be associated with poor motivation and low self-esteem, which, in turn, lead to inactive learning and continued suppressed academic performance. If motivational and affective components of learning are lacking or misdirected, the learning disabled students may not plan work according to accurate predictions of task difficulty, select appropriate strategies, monitor and check results, or change problem-solving routines when necessary (Hagen et al., 1982).

Training in metacognition. Assessing deficiencies in what learning disabled students know about their cognitive systems, as well as how they approach and solve problems, is a possibility for remediation. This view of learning disabilities considers that the problem may lie within the students' approach to solving problems (Hagen et al., 1982).

If more meaning can be derived from a reconstructed school curriculum by being taught a system of strategies for learning, learning disabled adolescents are likely to become more active learners. Cognitive monitoring or self-awareness of thinking processes is a developmental ability. As students enter adolescence, their ability to engage in abstract thinking increases and their self-consciousness takes on new meanings with real aplications for being able to control their own thinking and behavior. An understanding of metacognitive skills can greatly enhance adolescent students' abilities to use appropriate strategies in learning. The learning disabled asolescents do not spontaneously use strategies that develop normally in the nondisabled adolescent. This compounds their inability to perform well in school. A knowledge of and training in metacognitive skills could help learning disabled adolescents become better equipped to deal successfully with school learning (Wiens, 1983).

Recent investigations suggest that metacognitive skills can be trained. Flavell (1979) has made the distinction that while cognitive strategies are invoked to make cognitive progress, metacognitive strategies are used to monitor this progress. This distinction suggests definition for training: Cognitive training involves instruction in task-specific strategies while metacognitive training

focuses on instructions in techniques to monitor and appraise this progress.

The notion of metacognition training is of value for the study of learning disabled students who, by definition, are not achieving what would be predicted from their general intellectual abilities. These students seem to be characterized by unused ability. Metacognitive training, with emphasis on effective self-monitoring of ongoing academic performance, appears to be particularly applicable to learning disabled students. It is reasonable to hypothesize that such training would benefit learning disabled students (Loper, 1982).

Encouraging students to monitor and reflect upon their performance would theoretically have two benefits. The first benefit would be increasing learning efficiency. By building automatic self-monitoring devices, students would be expected to become more consistent and accurate in performance and previously acquired knowledge would be more efficiently retrievable. The second benefit would be greater insight and understanding, generating new knowledge that has the permanence of a self-product.

The Learning Disabled Adolescent in School

Characteristics of learning disabilities. Many professionals have attempted to describe the specific characteristics of students who have been identified as learning disabled. The descriptors, for the most part, cover a wide range of negative attributes and most of negative behaviors listed in the literature are attributed to young learning disabled students and generalized to the adolescent. Myers and Wiseman (1978) believe that characteristics of adolescents as

related to home, school, and specific learning problems would be quite different from those found in students. Some of the characteristics descriptive of young learning disabled students (hyperactivity, distractibility, aggressiveness, and peer relationship problems) may not be present in learning disabled adolescents who have learned to control, cope, and modify behaviors through time, experience, and the social conformity of many teenagers.

The literature related to characteristics of learning disabled adolescents is not only minimal but lacks empirical validation necessary to generalize to large populations. Three possible explanations for this lack in the literature are the following: (a) Until recently, there has been a lack of emphasis on programming for the secondary school-aged learning disabled student; (b) There has been little agreement about identification procedures; and (c) Varied criteria have been used to observe this population of students (Myers & Wiseman, 1978).

Characteristics delineated by researchers (Strothers, 1971; Jones, 1972; Russell, 1974; Bryan, 1974) related to adolescents with learning disabilities include:

1. Major cognitive deficits
2. Excessive daydreaming
3. High distractibility
4. Severe underachievement
5. Inflexibility toward ideas and activities
6. Perceptual confusions
7. Hyperactivity
8. Short attention span

9. General body or motoric awkwardness
10. Inadequacy in dealing with symbols
11. Secondary motivational problems
12. Immaturity
13. Physically smaller than peers
14. Frustration with self
15. Inner rage
16. Passive or active aggression, feelings of inadequacy
17. Alienation from their families
18. Delinquency
19. Truancy
20. Confusion
21. Difficulty in generalizing from experience
22. Problems in modifying behavior
23. Difficulty in choosing from alternatives
24. Tendency to make snap decisions and judgments
25. Few established principles or ideals
26. Yields quickly to immediate pressure

Problems of learning disabled adolescents. Recently, attention has turned to addressing the educational and life adjustment needs of adolescents and young adults. However, a prerequisite step to developing sound instructional systems and procedures for the teenage learning disabled is for the field to achieve a thorough understanding of the complex nature of the condition of learning disabilities in older populations (Deshler, 1980).

There are some unique problems related to adolescents with learning disabilities which have not been adequately addressed within

the research on learning disabilities in elementary populations. The demands of the curriculum in secondary schools or job requirements in employment settings are significantly different from the demands placed on learning disabled students in elementary settings. Secondly, there are many variables associated with the condition of learning disabilities. It would appear that the complexity and interaction of these factors increase as the adolescents move from school to non-school settings and as the number and variety of their social groupings increase. Thirdly, there is very little knowledge about the conditions confronting learning disabled adolescents and young adults in non-school settings and the degree to which these individuals can cope with these circumstances (Deshler, 1980).

Deshler (1980) contended, for example, that a profile of the older-aged learning disabled students begins to emerge only when the students' perceptions of their academic performance and ability, preference for school, explanation for academic failure, and expectations for post school and success are considered.

Self-perceptions of learning disabled students. A student's self-perception is one of the foundations of identity. Consequently, how students perceive their learning disabilities will affect their identity. For educators, these factors directly affect our success in teaching learning disabled students. As students develop an accurate perception of what they can or cannot do, the synergetic effects of frustration, laziness, and apathy that prevent learning may be wiped away.

In recent years, the development of students' understanding of health-related concepts, including those pertaining to psychological

disorders, has attracted the attention of researchers (Biboce & Walsh, 1980). Students' concepts of mental retardation were examined by Budoff, Siperstein, and Conant (1979) but so far there have been few scientific investigations of students' understanding of learning disabilities (LD). It is important to determine students' understanding of learning disabilities since there is some evidence that students with learning problems who receive and are informed about a diagnosis of learning disability may show a more positive self-evaluation than those who are similarly diagnosed but not informed (Rosenthal, 1973).

Serafica and Sweazy (1982) conducted a study to determine whether there are age-related changes in students' conceptions of learning disabilities. Students' conceptions of learning disabilities were elicited through an open-ended questionnaire designed to reveal students' understanding through their descriptions, explanations of origin, and ideas about treatment or prognosis. The study found that, with increasing age, students' descriptions and explanations as well as their ideas about the treatment and prognosis of learning disability changed from being undifferentiated, incomplete, and inaccurate to being more differentiated, complete, and accurate.

Myers and Wiseman (1978) examined the self-concept and attitudes of learning disabled adolescents related to school and specific learning disabilities. They found that learning disabled students perceive themselves as being successful persons in the future and trying to establish principles or ideals for themselves. Their research indicated that learning disabled adolescents do not perceive many of the negative social relationships discussed in the literature or the negative personal behavior and learning characteristics

attributed to them by the few studies in this area.

By contrast, other research with failure-prone and underachieving students suggested that remedial efforts may be hindered by the development of negative affective characteristics in students who have a persistent school failure (Covington & Beery, 1976; Hamacheck, 1978). Numerous clinical studies of learning disabled students support this contention. Griffiths (1970), for example, noted that the one major similarity among 32 learning disabled students treated in a psychoeducational clinic was their low level of self-confidence and self-concept. These students appeared to have a sense of discouragement about chances of future school success where such skills as reading and math were emphasized. Frostig (1963) suggested that poor and inadequate school performance, especially in reading, will adversely affect future learning efforts or outcomes.

Chapman and Boersma (1979) investigated academic self-concept, academic locus of control, and self-expectations of learning disabled students. They found that the history of school failure which typifies learning disabled students appears to be associated with more negative self-perceptions of ability, external attributions of responsibility for school success, and lower expectations of future success in academic tasks. The findings for academic self-concept indicated that despite the fact that learning disabled students are well within the normal range of ability, their self-perceptions of ability were much lower in comparison to normally achieving students. Furthermore, by grade three, learning disabled students have already developed relatively lower self-perceptions of ability and concomitantly lower expectations for future school success. In

addition, negative academic self-concepts have already probably contributed to the feeling in these students that when successful school outcomes do occur, the cause lies more with external factors than with their own abilities.

It has been documented that learning disabled students suffer from low self-concept. It is conceivable that their poor self-concept relates not only to their repeated experiences of failure and labeling by others but also to lingering doubts as to the cause and extent of their disorders. Some authors contended that the self-image of learning disabled students is particularly vulnerable during the adolescent years (Rosenberg & Gaier, 1977). Gardner (1968) advocated frank counseling with brain-injured students regarding the nature of their problems. In his practice, he found that students' fears can be compounded by ignorance.

The complexity of theoretical formulas of learning disabilities has been frequently decried even by professionals working in the field (Cruickshank, 1972). Even if the concept of learning disabilities is explained, how will the explanation be received by students who are personally involved and who may have difficulty understanding complex verbal messages?

Twenty-six learning disabled students were interviewed. It was found that few of the students understood that they were learning disabled or what a learning disability was. Few said that they had asked for or received an explanation of their handicap. More were aware of some difficulty in school, and specifically in reading, despite the fact that they generally considered themselves at least somewhat bright. When asked why they had problems in reading, most

of the students said they did not know. Some attributed their difficulties to their own lack of effort, usually in early grades. Six students made some reference to perceptual problems or letter reversal. Most said that they had heard of the terms "learning disability" or "dyslexia." They acknowledged, however, that they had heard these words but did not know what they meant. When asked for an explanation, some defined it as learning problems; others referred to letter reversals or symbol confusion. A small percentage included a reference to brain damage or dysfunction, and some felt that they refer to people who are "slow to learn" or "dumb." They felt that they were learning quite well at the time of the interview and anticipated that their learning problems would endure for only a short time. Some subjects believed that their learning problems would disappear within one to three years. Only one felt that his learning disability would last forever. Despite the limited knowledge of their handicap, several elements of traditional formulations of learning disabilities were somehow understood by the adolescents. Many felt that they were fairly intelligent overall, but deficient in certain specific abilities. They did not attribute their problems to those conditions usually contained in an "exclusion clause" in a definition of learning disabilities--physical or sensory handicap, emotional disturbance, cultural deprivation, or global mental retardation. They did not, however, understand the causes of their problems. Many imputed it to themselves. A conclusion of this study was that a better understanding of learning disabilities by the subjects would be in their long-term interest. Further, explicit counseling techniques for learning disabled students may help to

combat the passive stance of these youths, who defer to adults the responsibility of programming their lives and understanding their problems for them. They should not be spared the necessary trials of adolescents which include learning one's strengths and weaknesses. The lingering confusion regarding the nature of their handicap must surely impede the emergence of an individual sense of identity and worth (Schneider, 1984).

Sachs, Lliff, and Donnelly (1987) also asked the question, "Are learning disabled adolescent students aware of their own disability?" In 1985 a learning disabilities seminar was incorporated into the curriculum of a private residential high school for learning disabled adolescents. There were 37 students enrolled in the seminar. The purpose of the seminar was to present specific and general information regarding learning disabilities. Students were informed about the varieties of learning disabilities as well as characteristics of a productive student. In addition, students were encouraged to identify their own learning abilities and disabilities and to analyze the impact of their learning disability on their education. The learning disabilities seminar aimed to have students acquire accurate information regarding learning disabilities and to implement this information in learning about their disabilities. Another objective of the seminar was to help students gain insight into the productive behaviors of a successful learner. Lastly, the seminar was to assist students in developing a personal plan for more productive learning.

Results of this study revealed that 83% of the students said they had a learning disability. They were also able to identify the type of learning disability they experienced. For the majority of the

students, this was the first time they were able to answer questions about their disability. The responses to these questions indicated that students appeared to be able to utilize the realistic foundation of information as a catalyst for coming to terms with their learning interferences and developing a plan for addressing those difficulties. They also appeared more self-confident and determined to be better students (Sachs et al., 1987).

The long-range impact was observed by faculty, who noted that students appeared to be more realistic, responsive, and cooperative. A decrease was found in nonproductive coping mechanisms, denial of the learning disability, and learned helplessness. They felt students began to accept more responsibility for their learning (Sachs et al., 1987).

Summary

Chapter 2 has presented a review of literature relevant to the topic of self-perceptions of learning disabled adolescents. Four major areas were reviewed: (a) self-image, (b) attribution theory, (c) metacognition, and (d) the learning disabled adolescent in school.

Learning disabled students are usually diagnosed in the primary grades, when lags in reading and writing become evident, and most attention is paid to them in elementary school. By the time they reach adolescence, most learning disabled students still need special help and special understanding, but secondary teachers are generally not prepared for them. They may still have lags of from one to five years in perceptual skills, language development, and conceptual skills.

Learning disabled adolescents are notoriously poor spellers, show poor logical reasoning and abstract thinking skills, and frequently display a high level of inconsistency in performance. They might make A's one day and F's the next. Their report cards are usually inconsistent, and teachers report inconsistent study habits and application skills. Learning disabled students lack good judgment. They make snap judgments, reach conclusions that do not follow from the rules, and fail to use problem-solving skills. Quite obviously, learning disabled adolescents are vulnerable. They are misunderstood, feel inadequate and stupid, and are not helped to any great extent in the traditional secondary school curriculum. During this trying time, adolescents are also striving to form a unique sense of identity. This is a very difficult time for adolescents.

Many learning disabled adolescents feel that achievement outcomes are outside the control of themselves and exerting effort to succeed is pointless. These learning disabled students learn to be helpless and often do not attempt tasks at which they cannot succeed. This "learned helplessness" refers to the learning or perception of independence between the elicited response of the individual and the presentation and/or withdrawal of aversion events.

Learning how to learn is known as metacognition. Metacognition refers to one's own cognitive processes. It refers to an awareness of an ability to capitalize on one's own self-knowledge and thought processes. Many learning disabled adolescents are deficient in certain metacognitive aspects. These metacognitive skills need to be taught to learning disabled adolescents. These skills would emphasize effective self-monitoring. This would help the learning disabled

adolescent become more consistent, and accurate, in performance and previously acquired knowledge would be more retrievable.

One of the most important tasks facing learning disabled adolescents is the formation of an accurate profile regarding their learning disability. This profile will not emerge until the adolescents' perceptions of their academic performance, abilities, strengths, and weaknesses are internalized. It is essential that students are counseled about their disabilities and that they can be made aware of all aspects of that disability. This counseling may help to alleviate the lingering confusion regarding the nature of their handicap and ensure a more natural emergency of their sense of identity and worth.

CHAPTER III

DESIGN OF THE STUDY

Introduction

The purpose of this study was to examine the self-perceptions and knowledge that adolescents who had been diagnosed as learning disabled have regarding their learning disability. It investigated the terminology used by adolescents in describing their learning disability. Also, the study looked for discrepancies between the students' definition of their learning disability and the definition as found on their Individual Education Plan. Lastly, it examined the strategies used by the students when they encountered learning problems. This chapter will explain the procedures undertaken in this study. Topics to be discussed are the following: (a) the subjects, (b) description of the research instrument, (c) data collection, and (d) treatment of the data.

The Subjects

The subjects of this study were 40 students from two high schools located in a city in North Dakota. The students consisted of 23 tenth graders, 9 eleventh graders, and 8 twelfth graders. Of these 40 students there were 16 male students and 24 female students. Their ages ranged from 15 to 18 with 5 fifteen year olds, 12 sixteen year olds, 11 seventeen year olds, and 12 eighteen year olds. All 40 of the students had been identified as learning disabled by their school district criteria. The school district's criteria met the federal

guidelines as outlined in Public Law 94-142. To qualify for this study, the learning disabled students all had an Individual Education Plan on file and all had received direct, individualized instruction. Parental permission for testing was obtained for each student.

Description of the Research Instrument

In the evaluation of behavior and learning problems in school-age students, there has been widespread application of questionnaires and rating systems. For the most part such instruments have been designed for completion by parents or teachers. Teacher questionnaires have been designed to gather information on students' patterns of behavior and coping in the classroom as well as on various aspects of academic performance. Parent checklists have been used to review early behavioral and medical data, to track development, and to document current patterns of function at home and in the neighborhood (Levine, Clarke, & Ferb, 1981).

Questionnaires and checklists have been developed to help students rate themselves. These have tended to focus primarily on self-esteem, social interaction, and status among peers. There also have been self-rated inventories of personality traits and interests (Levine et al., 1981).

The research instrument used in this study was developed by the writer. Self-perceptions of learning disabled adolescents is a relatively new area and no formal or informal instruments were found that related to this topic.

The instrument (see Appendix) consisted of 5 questions and 63 statements. The 5 questions pertained to the students' knowledge of

their disability and asked whether the subjects knew why they were in a learning disabilities program and how long services had been provided. The 63 statements were characteristic of various learning disabilities derived from the research literature and the writer's experience as a learning disabilities practitioner. Students were asked to read each statement and mark the ones that described their learning disability. The following learning disabilities were represented: reading - 14 items (e.g., "When I read I sometimes reverse words or parts of a word"); math - 7 items (e.g., "I have trouble with fractions and decimals"); written language - 7 items (e.g., "I often leave off the endings of words when I spell"); concentration and organization - 10 items (e.g., "I have a difficult time planning my work"); visual motor - 1 item (e.g., "I have poor handwriting"); oral language - 3 items (e.g., "I have trouble explaining my ideas"); auditory discrimination and/or memory - 6 items (e.g., "I have a hard time following directions when they are given to me orally"); and visual memory - 4 items (e.g., "I have a hard time following directions when I read them"). There were also 3 items that dealt with test taking (e.g., "I get nervous and confused when taking a test and I usually answer questions wrong"); 2 items that dealt with student learning disability (e.g., "I understand what my learning disability is"); and 4 miscellaneous items (e.g., "I have problems in almost all of my subjects"). These statements were representative of comments expressed by learning disabled students during nine years of teaching them by the writer.

Data Collection

The 40 learning disabled students from grades 10, 11, and 12 were identified as meeting the minimum eligibility requirements of this study by their learning disability teachers' review of their records. Minimum eligibility requirements were special education services including an Individual Education Plan and direct, individualized instruction. Parental permission was obtained and students were told that they could decline to participate.

The students were asked their grade in school and their age. They were told to mark male or female on the questionnaire. Students were then requested to respond to two questions dealing with the reason why they were assigned to that particular room and how many years they had received services. Their responses were recorded by the writer. The next step involved having the students read a 63-item questionnaire. Each item was characteristic of a learning disability. They were asked to mark the items that they felt described their learning problems. On three occasions the statements were read to the student because of the student's reading disability. Lastly, students were asked to respond to three questions about their IEP conference, how they would label their learning disability, and how their learning disability is labeled on their IEP.

Treatment of the Data

Interviewing was the dominant strategy for data collection. The 63-item questionnaire was used as a probing instrument. The writer asked the students to explain why they had marked each particular item and recorded their responses. Additional information was obtained regarding each response (i.e., "What would you do when this happens?").

When the students had identified their learning disability, their responses were then compared to the definition of the learning disability as stated on their Individual Education Plan. Also of interest were the descriptions given regarding strategies used when they encountered problems in their daily academics. Their responses were analyzed to determine what type of metacognitive skills they used (i.e., predicting, checking, monitoring, rehearsing).

In chapter 4 the analysis of the data will be presented.

CHAPTER IV

STUDENT PERCEPTIONS

The purpose of this study was to examine the self-perceptions of learning disabled adolescents. More specifically, it was to determine what kind of knowledge the adolescents had about their disability. The data pertaining to this purpose are presented in this chapter.

Interviewing was the dominant strategy for data collection from the 40 learning disabled students. The 68-item questionnaire was utilized as a probing instrument (see Appendix). Additional information was obtained in relation to each response (i.e., "What would you do when this happens?"). The interview data were organized by compiling all students' answers for each question. All of the responses for each question were analyzed for similar types of replies, which were classified as themes. Five major representative themes emerged from the responses to the 68-item questionnaire as follows: Problems in Reading, Written Language, and Related Subjects; Study Skills Problems; Math Problems; Student Attitudes; and Learning Disabilities. Related sub-themes also were identified.

In addition to the themes, the responses to the five additional questions were given.

The order of presentation for the findings is as follows:

Theme 1: Reading, Written Language, and Related Subjects

Theme 2: Study Skills Problems

Theme 3: Math Problems

Theme 4: Student Attitudes

Theme 5: Identification of Learning Disabilities Questions 1-5

Theme 1

Reading, Written Language, and Related Subjects

Decoding Problems

Fifteen students stated that they had problems sounding out new words. The typical responses included:

> I can't figure out words. I have always had trouble pronouncing words correctly. If I don't know a word I try to sound it out; if I can't I ask someone. My reading level is pretty low. It is still at the elementary level I am sure.
>
> I try to sound them out. Sometimes I try combining it with other words in the sentence.
>
> If I've never heard it then I don't know how it goes. I need to hear words before I can read them. If they are alone I usually can tell you the sound, but if they are in combinations I don't always get them.
>
> I say them like they are spelled. I don't know the rules for sounding out words. Sometimes when I read I can hear a mistake but I don't know how to correct it.
>
> I don't always know the words because I can't sound out the words. I need to have someone else say the words first.

Skipping Words

Related to decoding problems, 19 students stated that when they came to unknown words they would skip them instead of trying a strategy to figure them out. Their responses included statements like:

> I usually skip hard words. It is easier if I just skip them.
>
> I skip them. Sometimes there are a lot of words that I do not know and when I read it I don't really know what it is about. I have listened to a couple of novels on tape and that really helps me.
>
> I ask parents or teachers for help. If they aren't around I just skip them.

> If I have to know the subject I'll try to figure them out or ask someone. If it's in a subject that isn't as important I skip them.

Using Context Clues

Sixteen students, however, indicated they have a strategy for figuring out unknown words. The statement on the questionnaire read, "When I do not know a word I use the other words in that sentence to help me figure out what the word is." Student statements read as follows:

> It usually is effective. I usually can figure out at least the general meaning of the word.
>
> It usually works. I finish reading the sentence and then go back. If I can't figure it I look it up in the dictionary or ask someone.
>
> Ya, the sentence sometimes gives me an idea of what the word is or what the word means.

Rereading

Rereading was a strategy many students indicated was what they used when the reading gets difficult. Nineteen students responded with statements like:

> I read it over and try to concentrate more. If I have time to do this I can usually pick up some of the ideas.
>
> I usually have to read something over and over until I know it. If I don't understand it in the first place sometimes that doesn't even help.
>
> I have to read things over again. This is true in certain subjects like government especially. Usually I remember after I've read it over. I don't always understand it though.
>
> I read the chapter or my notes over and over. Sometimes this helps. Discussion helps me more. I like to have someone tell me what the chapter is about. It always helps me if I can talk about things.

Comprehension Problems

Comprehension problems were indicated by 19 students. Their responses included the following:

> This happens a lot. I have problems with pretty much everything unless it's something I really enjoy, like cars.
>
> When I read I don't understand what I read.
>
> When I read something I don't understand what I read. I have to go over it with someone. It's better then.
>
> I ask someone what was in the chapter. If there is no one to ask I would probably blow it off.

Memory Problems in Reading

Twenty-four students indicated that they experience memory problems in reading. They responded with statements similar to the following:

> I get help from my sister. She reads it to me. She also explains it to me. She is a freshman.
>
> If a teacher reads it to me I can remember it sometimes. If someone talks about the idea it helps. This shortens it and they can use vocabulary I know.
>
> I forget what I read. Science is the most difficult. I don't like it at all. I have to go over things again. Sometimes I can remember it then.

Slow Rate of Reading

Thirty-seven students indicated they read very slowly and that interferes with their reading progress. The following statements are samples of the 37 responses:

> It always takes me longer to read than the other kids in my class. I am always the last one done when we have a reading assignment. I suppose it is because I always have to reread things. I don't understand things very well when I read them, especially if I go too fast. I always have to go over things a couple of times before I know what is going on. It gets kind of frustrating.
>
> I know my reading rate is slow. I usually don't complete assignments. I always have to take stuff home.

> I read pretty slow. I can't finish my reading assignments in class. If I'm reading about motorcycles or something I like, that I can read faster though. If it's something I like I can read faster.
>
> My reading rate is pretty slow. I don't normally finish. I skim to get through. I hate it when I don't finish like the rest of the students. I want to complete things like the rest of the students.
>
> I don't know how fast I read but it takes me a long time. In the 6th grade it took me 14 weeks to read 110 pages.

Reversal Problems

Reversal problems were indicated by 13 students. Most of the students could not think of examples and said things like:

> I can't think of any examples but I know that I have done it.
>
> I have reversed was and saw and, like for its, I may put tis.

One student, however, stated:

> When I see words they are backwards. Well, it's like you put words in a mirror. I had a difficult time learning to read. I didn't learn how to read until 4th grade. I still have problems but I can usually figure out what I am reading.

Vocabulary Problems

Vocabulary problems were also expressed by students. They were concerned with both their reading and listening vocabularies. Fourteen students made statements about their reading vocabularies that were similar to the following:

> I look them up in the dictionary and write down the meanings. I have to go over them 2 or 3 times in order to really learn them. Lots of times I forget them after a short time.
>
> I have to work harder than most people to learn them. This happens in all of my classes. I guess I have the teacher help me most of the time.
>
> I read them and put them in sentences and then try to understand them. Sometimes I can learn them this way.
>
> Well I try to study them hard and then I can learn them. In order for me to learn them I have to have someone tell me once what they mean.

> I learn best when the teacher explains them to me. If I am alone I write the word down and look it up in the dictionary. This doesn't always work because sometimes the definitions are too hard to understand.

Nine students also had concerns when they listen to difficult vocabulary. They made statements like the following:

> I get mixed up sometimes, especially if teachers use big words when they talk. I get confused and then I lose the whole idea of what the teacher is trying to say.
>
> After I listen for awhile I get mixed up and start mixing words around in my notes. I start to put the wrong things down.
>
> Teachers don't stop and explain. They don't stop, they just go on and on. I usually don't understand the vocabulary they use. I have to ask the person next to me what was said.
>
> They carry it on so long. They think they should be smarter and use big words. They think they are in college or something.

Reading Aloud

Students expressed the idea that they could understand their reading better if they could read aloud their written materials. Twenty-two of the students interviewed indicated this. They stated things like:

> I just do it that way. I always move my lips or kind of whisper it when I read. I suppose I do it the most if something is difficult for me to read.
>
> I think hearing it helps me. I usually move my lips or read it very softly. I suppose I learn best if I hear it. That's what kind of learner I am.
>
> Well on real hard stuff I like to read it out loud and have someone listen to me and help me so that I can make sure I read it right. I like to have people read it to me also. I guess I learn best when I can listen to the material.
>
> I like to read out loud if I can. I can listen to what I say. I usually read out loud if I am alone. In class I whisper to myself or move my lips.
>
> When I read, things don't go through my mind. Reading aloud helps me concentrate better. In the classroom I don't read aloud. I guess I move my lips or whisper softly.

Taped Textbooks

Four students indicated that they use taped textbooks. They indicated they were helpful with statements like:

> I think they are effective. I seem to be able to comprehend better. Hearing it seems to help. I seem to keep going at a more steady pace.

> I use them for a lot of novels and really hard things. They help me concentrate.

Auditory Discrimination

Students were asked if they confuse similar sounds, such as sand and send or bet and bit, etc. Four students indicated this was a problem for them. Two of these students explained:

> Well I confuse them both in reading and writing. I can remember saying words wrong all of the time. Vowel sounds were very hard for me.

> Well in spelling I can't get sentences that have alike words.

Auditory and Visual Memory Problems

In addition to memory problems in reading, students indicated they experienced auditory and visual problems. In the area of visual memory, 26 students made statements like:

> I think that teachers erase things too fast. They don't give you enough time to copy things down. I ask my friends for notes. Sometimes I just leave it.

> The teacher erases things too quick, just when I am getting it all down. It takes me longer to look at things and remember them.

> The stuff hasn't sunk in before they erase it. I get the stuff from someone else.

Twenty-two students indicated problems with auditory memory with statements like:

> My disability is in memory. This memory problem stops me from doing things. Writing things down helps me a lot.

If it's a lot it's hard to remember. Sometimes teachers go too fast. Sometimes I do ask them to repeat things though.

Sometimes I get confused when my instructor tells me a lot of things to do. It really depends on how many things they tell me to do. I can usually remember a couple of things.

I can only remember about two things. I think that part of it is that I get nervous when people tell me to do things. When I don't feel under pressure I don't forget as easy.

When someone tells me several things to do I forget them. I'm okay if I write them down.

Spelling Problems

Thirty-two students indicated they had some problems with spelling.

Some of these students made statements like:

I spell everything how I think it sounds. I confuse sounds that tend to sound alike. I have done that since I was little.

Well I try to spell words how they sound. They are usually wrong, especially long words. If I can't figure it out I ask someone.

I always have had problems in spelling. I have lots of problems with big words. I just have to go over them until I memorize them. Sometimes I can spell words that I can't say if I go over them letter by letter.

I don't know spelling rules. I never seemed to learn them.

I learned most of the rules on small words and not on bigger words. I can't apply the rules to big words.

I usually don't think about the spelling too long. I just guess.

Written Language Problems

Thirty students expressed concern over written language problems.

Their statements included:

I don't have too many problems with spelling. It is mostly with grammar and punctuation. I get points off on some of the things that I write because I leave off something or don't write the sentence correctly. Sometimes I have someone proof my paper and sometimes I just hand them in the way they are.

I hate to write. I make a lot of mistakes. I don't spell right, I don't write good sentences, and I forget to use

> correct punctuation. That's about it. I always have my parents proof all of my papers. They point out my mistakes and I rewrite my papers.
>
> I am just a poor writer. Writing is part of my disability. I make all kinds of mistakes. I always have someone proof my papers.

Oral and Written Expressive Problems

A problem expressed by 34 students was difficulty expressing their ideas both in oral and written form. Their responses included the following:

> I can't write my ideas down. I can explain things in words. I think of things to say and can talk about them but just can't seem to get them down on paper. They just don't come out right.
>
> It is easier for me to explain things than to write things down on paper. I usually know what I want to say but when I have to write it I can't think of the right words. I hate essay tests.
>
> Sometimes I understand things and can do things but I can't explain what I am doing or about the things. I might have an idea of what to say but can't explain it. Like compound interest, I know what it is pretty much but couldn't explain it to you.
>
> I can't find the right words to explain things. I know what to say but I can't pull out the right word.

Fine Motor Problems

Nineteen students expressed concerns over their writing in cursive. Most of them felt they were neater if they printed. They made the following comments:

> I always print. My cursive is very sloppy. I can't even read it myself.
>
> I can't read my writing. It is better if I print. Sometimes teachers say it's bad too.
>
> I don't know how to write all of the letters in cursive.

Theme 2

Study Skills Problems

Notetaking Problems

Another concern that emerged from the questionnaires was in the area of study skills. One area that was of importance to students was notetaking. Sixteen students expressed problems with their notetaking skills. Examples follow:

> I can't tell what is important and what is not. I just sit and write and try to write everything. History is the hardest class. There is so much information to learn in that class. Home Ec is the easiest. I have never been taught to take good notes.

> Well in the past I have tried to write down too many things. I try to write down everything. I get mixed up and pretty soon I am behind and not getting anything down. Sometimes if it is before a test or something I will look at someone's notes to see if I missed anything. I've never really been taught to take notes.

> I try to sketch something down so it looks like I am writing. I can never take good notes and I don't want to look like I'm not taking notes so I write anything. I have never been taught how to take notes.

Test Taking and Test Anxiety

Test taking and test anxiety were problems for a number of students. Twenty-seven students expressed concerns about test taking skills and 22 have experienced test anxiety. The following statements are examples of their responses:

> It takes me a long time to figure out what they are asking. Well when I read a test I can't always tell what the teacher is asking. Sometimes the questions are harder to figure out than the answers. It would help if I could find out how to take tests.

> It takes me a long time to get my thoughts organized. I take most of my tests in the regular classroom. If I don't finish sometimes I can stay and finish or take it to the LD class.

> I take longer on the questions. I try to visualize my notes. After awhile I can picture my notes and recall the information. I take most tests in the LD room.

Students discussed their feelings of anxiety:

> I always feel rushed. I also really worry about flunking.
>
> I just get nervous. I get butterflies. This makes me forget a lot of answers. Most of the time I take tests in the LD room.
>
> Things just leave my mind. Then I start to panic and my whole test is affected.
>
> I try to study real hard. My head just goes blank. It helps to take them in the LD room.
>
> I just blank out. It seems like I can't remember until I hand my paper in and then I remember what I was supposed to answer. That really bugs me.
>
> I sometimes blank out. Information is just washed from my head it seems.

Planning Work

Nineteen students expressed concerns about the way they planned out their work and organized it. Their responses were similar to these:

> I always seem to forget to do assignments or forget what they are. I used to keep an assignment book when I was younger but I don't anymore. I guess I should. Then I wouldn't forget what I have to do. I don't organize my work. I don't keep track of when things are due and that screws me up. I also don't schedule my time. I always leave things until the last minute.
>
> I don't really have a plan. I really should. I really panic if I have 3 or 4 things due at the same time. Sometimes I get so panicked that I have a hard time getting anything done.

Completion of Assignments

Fifteen students discussed homework completion with statements similar to the following:

> I have so many assignments to do. I start on one and then I change and work on something else. I don't complete one before I start on another one. I only study until 10:00.
>
> I'm too lazy to complete everything. I can't do things when I'm alone. I can't even remember what I'm supposed to do.

Organization

Keeping work together and organized was also a problem for students. Twenty-one students expressed problems such as:

> I am always losing my papers. It seems as if I always lose things in my locker and then find them again when I clean my locker. We have talked about this but no one ever sat down and helped me organize my things.
>
> Well it takes me awhile to find things. It would help if I would keep my locker clean. I don't have a separate notebook for each class. I just grab some papers and keep them in my books. We have talked about how to organize myself better.
>
> I have papers all over the place. If my teachers give me something I usually lose it. I never seem to be able to keep things, especially after a week or two.
>
> I spend so much time just trying to figure out what I'm supposed to be doing.
>
> I always stick papers in books or magazines and then they usually get lost. I had a good organized system but I quit using it. I got tired of it. I guess I should use it again.

Listening Problems

Listening also emerged as a problem for students. Nineteen students expressed concerns in this area. Examples are as follows:

> They go on and on and then I stop listening. Sometimes then I get bored.
>
> I guess I go through the motions of listening but it isn't really getting through to my brain. Anyway I forget things right away.

Following Directions

Following directions is an important part of school. Nineteen students indicated that following directions was a problem for them with statements like:

> When I read directions I have a difficult time understanding what to do. This is pretty much true in all of my classes. I always have to ask my teachers. I think things are easier if I hear them.

> If they are easy I can usually understand them. If they are long then I have a difficult time understanding them. I ask the teacher. I don't look for key words or phrases in the directions. I just read them and see if I can figure out what to do.

Oral directions proved to be difficult for some students:

> I don't catch everything. I miss some of the points. Teachers usually go too fast.
>
> I try to listen and say things over to myself as the teacher says them. This usually helps me.

Theme 3

Math Problems

The Four Basic Processes

Thirty-six students indicated that they had no problems with adding, subtracting, multiplying, and dividing. Others expressed some problems:

> It is easy unless I go too fast and then sometimes I make stupid mistakes.
>
> Division causes me some problems. Sometimes they just come out wrong.

Problems emerged in things like fractions, decimals, etc.:

> Well this year I had no problems with geometric figures, radius, volume, area, and things like that. I would get mixed up and confuse the formulas and stuff.
>
> I have trouble from day to day remembering how to do problems. I use a calculator for all of my work. Most of the time I do my work in the LD room and there I can use a calculator.
>
> Last year I had this math class--what a nightmare. It was business math. I reversed some of the numbers and I couldn't get the numbers in the correct volumes.
>
> I have a learning disability in math. I can do math if I go slow. Sometimes I am off on adding and subtracting. I do have to go slow. Sometimes with fractions and decimals I can't remember what to do.

Story Problems

Story problems were difficult for 20 students. Comments were made such as:

> When I read it is hard to understand what to do. I don't know if I should add or subtract. I have to ask the teacher.
>
> I look for key words but I have a hard time figuring out the process. If I can figure the key words I can usually figure out the process.
>
> Sometimes they'll put too much information and sometimes not enough. Sometimes they'll put just enough but in a yucky way.

Theme 4

Student Attitudes

Student Rushing

Nineteen students indicated that they really want to finish their assignments, at all costs. Some examples included:

> Like when teachers want an assignment done I write down anything to hand it in. I don't want to feel dumb when everyone else hands theirs in. Yes, it may make my grades bad but I guess I'm more concerned about how I look. Well I usually am the last one to hand it in anyway, and if the teacher waits to go on with something else everyone gets impatient with me and I feel dumb.
>
> I always think it must done when everyone else is done. I don't want to be the last one done. I don't want to look dumb.
>
> I just try to get done. I rush to get done.

Careless Mistakes

Twenty-three students felt that they make a lot of careless mistakes. Their responses were similar to students who rushed to finish. Their responses included:

> I go too fast. I want to catch up with everyone else. I don't like to be different in any way. I don't want to look dumb.
>
> I always want to get through and don't care if it's good or bad most of the time.

Daydreaming

Daydreaming was another problem addressed by students. Twenty-two students stated that daydreaming interfered with their classes. Their responses included:

> I'm not interested in school. Daydreaming is about all I do. It is my favorite thing in the world to do. I love to fantasize. I fantasized about if I could be naturally smart. I get so angry because of it. I'm not smart so I don't like to try. I really wish I was smart.

> I daydream about a lot of things. I like to get my mind off what is going on. It gives me a little break when things are boring or tough.

School Is Boring

Most of the students said they daydream when school gets boring. A similar question revealed related responses. Twenty-one students responded similarly to the following:

> School is boring. I would rather be doing almost anything else.

> I get bored. I really don't get into schoolwork. To me it's not important.

> School is boring. I usually don't want to do it. I like to talk to people and that interferes with my work. I am a very hyper person and I can't concentrate on one thing very long.

Students Easily Distracted

Being easily distracted was cited by students as a reason they could not keep their minds on their schoolwork. Fourteen students made comments like:

> I need things real quiet. I can't think very well if people are disturbing me. I try to study in a room where there aren't very many people or where we need to keep it quiet. At home I usually study at the table or in my bedroom. In my bedroom it is pretty quiet.

> I am easily distracted by noises and people, especially if I am struggling. It's easy to get lazy because it is so frustrating and it is such a struggle that sometimes I quit trying as hard as I should.

Laziness

Nine students felt that their teachers think they are lazy. They made comments such as:

> I think my teachers think I am lazy. I was behind in one of my classes and didn't get all of the work. I went to talk to my teacher and he said that I didn't have a learning disability, I was just lazy.
>
> One of my teachers once told me that my biggest disability is knowing that I have a disability. I don't think teachers understand.
>
> They think I am lazy. I just don't care what my teachers think.

Students Hating School

Twelve students said that they hated school. They made comments like:

> I'm a smart person in the world. I'm not an airhead. I know the facts of life and I really think that school does not really show how smart you are. I know things, lots of things. I just can't always get across what I know, especially in school. I hate it!
>
> It's kind of hard. I don't like being different. I feel like you're out of place and should be put somewhere else.
>
> I despise school! Totally! I hate work, teachers, and wasting my time.

Theme 5

Identification of Learning Disabilities

Knowing they were learning disabled, the last theme to emerge dealt with the students' learning disabilities. Even though 31 students indicated that they had a learning disability, their answers varied when they were asked about their disabilities.

> I don't know what it is in. I'm not sure I really have a learning disability.
>
> It is in all of my classes.
>
> It is in math.

It is in reading, spelling, and writing.

Understanding Their

Learning Disability

Twenty-seven students marked that they understood what their learning disability was. Examples of their responses include:

> I am a slow interpreter. I usually need to talk about things over and over before they make sense. I really need things explained to me. I also have a difficult time learning new words.
>
> It is in spelling and English mostly.
>
> I am slow.

Questions 1-5

In addition to the questionnaire, students were asked five questions. These questions were designed to determine how much students could explain about their learning disabilities. They were written to find out the extent of personal knowledge the students had about their learning disability.

The first question was, "Why have you been assigned to this classroom?" The writer was concerned with the terminology used by the students and wanted to see if they used the term learning disability in their answers. Four out of 40 said they were there because of a learning disability. The 40 students answered as follows:

> I came into this room to get help with my science.
>
> Because I did poorly when I took a math course in junior high.
>
> This teacher explains things to me. It's easier than in the regular classroom.
>
> I'm having problems in school.
>
> I don't know.
>
> I have a specific learning disability.

I need help in different subjects.

My grades are low.

I have trouble reading.

To get help I suppose. I also have worked on some kind of skills.

I have a learning disability.

I have a reading and spelling problem.

For reading.

I don't know. I don't do good on assignments.

Just to help me get better grades.

For reading.

I am a slow interpreter. I also have poor study habits.

I have a problem in reading.

I have problems in English, reading, and spelling.

I am slow in math.

I have trouble with my homework.

Because I have problems with spelling, reading, and organization.

I have a reversal problem.

I need help in math.

For reading and spelling.

I don't know.

Because I have a hard time understanding school assignments.

Because of a severe learning disability.

To study for tests.

I have problems reading. I'm a slow reader.

It helps me.

Because of my learning disability.

I just got out of special ed and I need extra help on things.

To get help with homework.

I couldn't understand the reading.

I don't know--I don't read that good.

I'm a slow learner--I have trouble reading.

I have trouble writing sentences. My teacher is helping me with my classes so I understand them.

My vocabulary is poor. I have trouble memorizing things. Also my comprehension in reading is bad.

The second question asked students how many years they had been in a learning disabilities program. Their responses ranged from "Ever since I started school" to "Since last year." Twenty-five students have been in a learning disabilities program since elementary school. The students answered as follows:

Since 5th grade.

Since I was in junior high.

I guess 5 or 6 years.

Since 6th grade.

Two years.

Since I started school.

Since elementary.

One year.

Three years.

Since 5th grade.

Four years.

Ever since I started school.

Since about 3rd or 4th grade.

For 4 years, since 7th grade.

Two years.

Six years.

Ever since about 2nd or 3rd grade. I had speech in the elementary too.

Since about 3rd grade.

Since elementary, since 4th grade I think.

Since I was in grade school.

Since 6th grade.

Since elementary.

Since 6th grade.

Six and one-half years.

I don't remember, since elementary I guess.

Since 7th grade.

Since 7th or 8th grade.

This is the fourth year.

Since kindergarten.

Since about 5th grade.

I think since 2nd grade.

Four years.

About 3 years.

Since last year. I was retested and put in LD instead of special ed.

About 8th grade.

Since elementary but I wasn't in it in 9th and 10th grade.

Since elementary.

I started in 6th grade. I got out once but couldn't handle it.

Starting in 4th grade.

Since 7th grade.

The third question was, "Did you attend the staffing where your teachers and parents developed your Individual Education Plan (IEP)?" Half of the students attended their staffing and half did not. Student responses were 16 yes, 18 no, and as follows:

Once, last year.

A couple of times.

My mom went.

Maybe once or twice.

Every year in high school.

I have only attended one staffing.

Question four asked, "On your IEP what does it say that you have a learning disability in?" Eighteen students responded with "I don't know." The other 22 responded as follows:

I haven't read it but I'm sure that it doesn't say I have a learning disability.

I think it says I am a slow learner or something like that.

I don't know what an IEP is.

I think it says I have trouble with reading and writing.

I can't remember.

Comprehending things.

Reading and math I think.

I haven't read that. I remember we talked about goals and things that I improved in.

I can't remember.

Math.

Reading, writing, and all that stuff.

Math and reading skills I think. I don't think I have one in reading.

It says it is in math I think.

Memory.

Taking tests.

Don't know what an IEP is.

I remember that we did goals but I don't remember what I said about my learning disability.

Reading.

I don't know what an IEP is.

Probably all in reading.

English.

Vocabulary, comprehension, memory.

Lastly, the students were asked, "What would you label your learning disability?" These responses were compared to the diagnoses as found on their Individual Education Plan (IEP). The comparisons are as follows.

An analysis of the responses indicated that 17 students had markedly different views of their learning disabilities as compared to their IEPs. They either did not know anything about their disabilities or their responses were different from their IEPs. Fifteen students were partly correct when their responses were compared with their IEPs. They either omitted part of the disability or added additional information. Eight students answered correctly. Their responses matched the diagnosis on their IEPs. Items 1-17 are students who had markedly different views of their learning disability, 18-32 are students who were partly correct, and 33-40 are students who answered correctly. Complete information follows in Table 1.

Summary

Forty students were interviewed to determine what knowledge they had about their learning disabilities. Their responses varied from students who knew little or nothing to students who appeared to

Table 1

Comparison of Student Labels to IEP

	Student Label	Diagnosis on IEP
1.	"I guess I would have a learning disability in memory."	Severe discrepancy between ability and achievement in reading. LD is in reading comprehension.
2.	"I don't think I have a learning disability. I'm just not really motivated."	30 point discrepancy between verbal IQ and performance IQ on WISC. LD in math and spelling.
3.	"It is in English or something like that."	Wide scatter on WISC. This student has an attentional deficit.
4.	"I don't have a learning learning disability."	Discrepancy between ability and achievement in reading comprehension. LD in reading comprehension.
5.	"I have problems in my coursework."	Severe discrepancy between ability and achievement in reading. LD in reading. Moderate discrepancy in written language (spelling).
6.	"School problems."	LD in organizational skills.
7.	"I don't know. I forgot."	Severe discrepancy between ability and achievement in written language. LD in written language. Moderate discrepancy in the area of reading.
8.	"Comprehending things in reading."	Student has a learning disability in auditory processing.
9.	"A learning disability in reading."	Severe discrepancy between ability and achievement in math. LD in math. Reading is below average but not severe enough to be a LD.
10.	"It is in understanding."	Moderate discrepancy between ability and achievement in math.

(table continues)

Student Label	Diagnosis on IEP
11. "I don't know."	Severe discrepancy between ability and achievement in the area of written language. LD in written language. Moderate discrepancy in reading.
12. "Taking tests."	Not LD. Least restrictive environment in LD classroom. Serious emotional problems. Emotionally disturbed.
13. "A learning disability in concentration."	IEP says disability is in math. Test indicates that student has only a .3 discrepancy between ability and achievement (at least 1.5 is recommended). This student does not qualify for LD services and will be dismissed.
14. "I don't know."	Severe discrepancy between ability and achievement in math and written expression. Severe deficit in spelling.
15. "Basically understanding subjects and how to study."	Learning disability in verbal skills. Delayed language. Also problems with auditory attention and short-term memory.
16. "Reading."	Severe visual perception problems. Severe discrepancy in written language.
17. "A problem with reading."	This student is achieving commensurate with ability. This student's reading skills are delayed. This student does not have a severe learning disability.
18. "I don't know--reading, spelling, and studying like I said."	Severe discrepancy between ability and achievement in the area of reading. LD is in reading.
19. "Math mostly."	Discrepancy between scores on WISC. LD in math, written expression, and listening comprehension.

(table continues)

Student Label	Diagnosis on IEP
20. "Something like math."	Severe discrepancy between ability and achievement in reading comprehension. LD in reading comprehension. Moderate deficit in mathematical reasoning.
21. "Reading and spelling."	Moderate discrepancy between ability and achievement in the area of written language. Moderate LD in that area.
22. "Math and spelling."	Severe discrepancy between ability and achievement in the area of math. LD in math.
23. "Interpreting."	Significant scatter on WISC. LD in auditory processing.
24. "Reading and spelling."	Severe deficit in reading, spelling, and math. Low average ability.
25. "Reversal problems."	Severe discrepancy between ability and achievement in written language. Visual perception problems.
26. "Math."	Moderate discrepancy between ability and achievement in math and written language. Poor auditory memory skills. LD in math and written language.
27. "It is in understanding."	Student is language delayed. There is a 30 point discrepancy between verbal and performance IQs on the WISC.
28. "It is in reading-- everything in reading."	Severe discrepancy between ability and achievement in all language arts areas. Severe disability in expressive language.

(table continues)

Student Label	Diagnosis on IEP
29. "Reading and spelling."	Weakness in reasoning and auditory memory. Severe discrepancy in reading.
30. "English disability."	Not achieving commensurate with ability in language. Disability in reading and written language.
31. "Vocabulary, comprehension, and memory."	Severe discrepancy in language areas. Severe deficiency in reading.
32. "Listening and completing homework."	LD in organizational skills and this student has an attentional deficit.
33. "Reading and spelling."	Severe discrepancy between ability and achievement in written language and reading. LD in written language and reading.
34. "Comprehension, spelling, and English, also memory."	Severe discrepancy between ability and achievement in reading and written language and also a severe deficit in memory. LD in reading, written language, and memory.
35. "Math."	Severe discrepancy between ability and achievement in math. LD in math.
36. "Reading, writing, and organization."	Severe discrepancy between ability and achievement in reading and written language. LD in reading and written language.
37. "Spelling and reading."	Discrepancy between ability and achievement in reading and spelling. LD in reading and spelling.
38. "Memory and this affects reading, spelling, math, and everything."	Severe learning disability affecting all areas. Recall problems. Memory deficits and attentional problems.

(table continues)

Student Label	Diagnosis on IEP
39. "Understanding."	Moderate discrepancy between ability and achievement in reading. LD in reading comprehension.
40. "Reading."	Severe discrepancy between ability and achievement in reading. LD in reading.

understand the complexities of their disability. Despite their limited conceptualization of their handicaps, several elements of traditional formulations of learning disability were somehow understood by these adolescents. Most of the students felt they were deficient in certain specific abilities. They did not attribute their problems to those conditions usually contained in an "exclusion clause" in a definition of learning disability--emotional disturbance, cultural deprivation, or mental retardation.

A summary, findings, discussion, and recommendations are included in chapter 5.

CHAPTER V

SUMMARY, FINDINGS, DISCUSSION, AND RECOMMENDATIONS

Summary

The purpose of the study was to investigate the self-perceptions of adolescents who have been diagnosed as learning disabled. The sample consisted of 40 high school students from one school district in North Dakota. All 40 of the students had been identified as learning disabled by their school district following federal guidelines as outlined in Public Law 94-142. To qualify for this study all students were required to have had an Individual Education Plan on file and all had received direct, individualized instruction.

This study was essentially qualitative in nature. Students' responses to items on a 63-item questionnaire were obtained from individual interview sessions. The responses were analyzed to determine how much knowledge the students had about their learning disability and how the labels used to identify their learning disability compared to the diagnosis on their Individual Education Plans.

Students' responses were divided into five major themes. The first theme included reading and written language as well as particular areas of concern to the student such as decoding problems, skipping words, using context clues, rereading, comprehension problems, memory problems in reading, slow rate of reading, reversal problems, vocabulary problems, reading aloud, taped textbooks, auditory discrimination,

auditory and visual memory problems, spelling problems, oral and written expression problems, and fine motor problems.

Theme two encompassed study skill problems which included notetaking problems, test taking and test anxiety, planning work, completion of assignments, organization, and following directions. Theme three addressed math problems. There were two sub-themes in this category: the four basic processes and story problems. Theme four included student attitudes with sub-themes of student rushing, careless mistakes, daydreaming, school is boring, students easily distracted, laziness, and students hating school. Theme five consisted of two sub-themes: identification of learning disability and understanding their learning disability.

Findings

The findings of the present study are addressed in the same order in which the research questions were presented. Each research question will be restated and followed by a summary of the major findings of the current study.

Research question 1. What perceptions do adolescents diagnosed as learning disabled have about their disabilities?

The students interviewed were very willing to discuss their learning problems. Students perceived their difficulties in terms of specific school problems they encountered academically. They did not think of their problems in terms of learning disabilities characteristics.

Research question 2. What terminology do learning disabled adolescents use to describe their disabilities?

The first question asked of each student was, "Why have you been assigned to this classroom?" The writer did not want to influence students by using the term learning disability in the question. It was of interest to see if students would use the term learning disability in their responses. Four students said they were assigned to this classroom because they had a learning disability. The other 36 students did not use the term learning disability in their responses.

Students were asked how they would label their learning disability. Students gave a variety of responses. One student used the term memory to describe his disability. Others used academic terminology such as reading, math, English, and spelling. Many students were vague in their explanations of their learning disabilities. Some examples are, "I have problems in my coursework" or "It is in taking tests." Some students knew what their problems were but did not use proper terminology. An example is, "It is basically in understanding" or "It is in interpreting." These students had a learning disability in reading comprehension and auditory processing. They knew the difficulties that they encountered in classes but did not use educationally descriptive terminology.

Research question 3. What metacognitive skills or strategies do learning disabled adolescents use?

The 40 students identified in this study did not all possess systematic metacognitive strategies. Seventeen students were able to monitor their comprehension. When they could not comprehend the reading material, they used a strategy of rereading the material to see if they could gain any insights. The other 13 were unable to monitor their comprehension. For many, this became a time of learned

helplessness. They would give up and rely on someone else to provide them with answers. Fifteen students were able to employ the strategy of using context clues to unlock problems in decoding or vocabulary thus helping with comprehension. This is a type of metacognition. The other 25 did not use this strategy. Vocabulary skills was one area where many students developed learned helplessness. When they came to a word they did not know, they would skip it or ask someone to help.

Research question 4. Are the labels used by learning disabled adolescents the same as those used on the Individual Education Plan?

Students were asked about their Individual Education Plans (IEPs). Three students indicated they did not know what an IEP was. Eighteen other students were familiar with the term IEP but could not tell what was written about their learning disability. The other 19 stated what they felt was written on their IEP.

Students were then asked to put a label on their learning disability. These labels were then compared to what was written on their IEPs. Eight students matched their diagnosis as written on their IEPs. These eight students used labels such as reading, spelling, and math. Their IEPs said they had learning disabilities in reading and written language (which included spelling) and math. Further analysis showed that 17 students failed to match the labels which were written on their IEPs.

Discussion

Attribution theory examines children's beliefs and expectations about their performance in success or failure situations. It is assumed that students make an evaluation about their performance, before, during,

and after a task. Prior to understanding a task, the students have a generalized expectancy of how they will perform based on past performances in the same general area. During the task the students may judge the difficulty of the task and their success rate. Attributions to explain their success ("I'm good at this") or failure ("This is too hard for me") may begin. After the task the students compared their initial expectation with their actual performance. Then they revised their perception of their control over success or rationalized their failure.

Learned helplessness refers to the act of giving up after failure. The learned helpless students lower their expectation of future success and avoid the task. Approximately 30% of the students interviewed appeared to exhibit learned helplessness. The learning disabled student who believes that academic success or failure is unrelated to personal effort will not be motivated to attempt an academic task or to persist once the task becomes difficult. Children who learn to be helpless do not attempt tasks at which they cannot succeed. The students who displayed learned helplessness indicated that they skipped tasks in reading that were difficult for them. The results of Tollefson et al.'s study in 1982 suggested that helplessness in academic tasks is an attitude held by many learning disabled students. Dweck and Reppucci (1973), Dweck (1975), and Diener and Dweck (1978) all made references in their studies to learned helpless students as those who overreact to negative feedback and give up after failure. This concurs with the results of Hagen et al. (1982) that learning disabled students may not plan work according to accurate predictions of task difficulty, select appropriate strategies, monitor and check results, or change

problem-solving routines when necessary.

These inefficient learners may be characterized not by poor memory and/or lack of ability but by inefficient strategies for discriminating, organizing, storing, and retrieving information. About 55% of the learning disabled students interviewed lacked appropriate cognitive strategies. They appeared to perceive a situation and act immediately rather than working through strategies to help deal with the problem. For example, in reading, many students expressed the fact that they had problems decoding new words. The learned helpless students either skipped the word or looked for some external feedback to supply the word. In contrast, students who were active learners figured out the word by some strategy such as phonics or contextual clues.

A learning disabled adolescent may become a more active learner by being taught a system of strategies for learning. This is based on the assumption that self-awareness of thinking processes is a developmental ability, which can be trained. Systematic instruction is how to overcome learned helplessness and students must be motivated to overcome inactivity, dependency, and incompetence.

Metacognition is essentially one's awareness of one's systematic use of efficient strategies for learning. Wiens (1983) found that an understanding of metacognitive skills can greatly enhance an adolescent student's ability to use appropriate strategies in learning. A knowledge of and training in metacognitive skills could help the learning disabled adolescent become better equipped to deal successfully with school learning.

When learning disabled students enter adolescence, metacognitive skills become even more important. During this time they develop a

heightened consciousness of their own and other people's psychological processes. Loper (1982) concluded that metacognitive training would benefit learning disabled adolescents. He believed that these students were not achieving what would be predicted from their general intellectual abilities. He described these students as being characterized by unused ability. Loper's views are in agreement with the findings of this study which showed that 13 students did not have metacognitive strategies for comprehension and 25 students lacked decoding strategies for vocabulary.

To be successful, learning disabled adolescents need to be more capable of reflective thought. If internal speech about one's own behavior can be taught, then their unsuccessful behavior can be changed. They must be taught self-questioning techniques to increase their ability to predict, plan, and monitor their comprehension and memory. It is likely that with instruction many of the students interviewed would be able to successfully overcome the learned helplessness and develop metacognitive strategies.

Students' understanding of metacognition, or their growing awareness of their own thought processes, should be of prime importance to teachers of learning disabled adolescents. The success or failure of a training approach may well depend on the students' capacity for awareness of what they are doing. A critical question teachers must continually ask as they develop training plans is, "What do the students perceive they are doing? How much self-awareness is required for this task?" Students' awareness of their own thoughts and behavior is an acquired skill and the students' present level of awareness is an important consideration and possibly a prerequisite for change.

This study is concerned with the question, "Are learning disabled students aware of their own disability?" Thirty-two students marked the statement, "I have a learning disability," on the interview questionnaire. Twenty-seven students indicated that they felt they understood their learning disability.

It is important to address this issue with adolescents. These students may be asking the question, "If I'm learning disabled, please tell me what I got and what do I do now?" Rosenthal (1973) determined that there is evidence that students with learning problems who receive and are informed about a diagnosis of learning disability may show a more positive self-evaluation than those who are similarly diagnosed but not informed. There are other reasons why teachers' efforts should be exerted in this direction. First, there is an ethical obligation to the students. Secondly, teachers can strip away students' ignorance, defensiveness, and avoidance regarding their learning disabilities. This would enable students to establish realistic academic expectations and implement reasonable compensations in their learning endeavors. Finally, teachers can become an ally to students. Informing students of the nature of their disability, emphasizing their strengths, and avoiding criticism will increase their self-esteem. Without this knowledge, remedial efforts may be hindered. Many researchers concur that self-concept issues play an important part in the treatment of the learning disabled adolescent. Griffiths' (1970) research supported that learning disabled students had a low level of self-confidence and self-concept. Chapman and Boersma (1979) found that the history of school failure which typifies learning disabled students appears to be associated with negative

self-perceptions of ability. Rosenberg and Gaier (1977) contended that the self-image of the learning disabled student is particularly vulnerable during the adolescent years. Gardner (1968) concluded that the student's fear can be compounded by ignorance. He advocated frank counseling.

When students are made aware of their disabilities, they can become more realistic, responsive, and cooperative. This also can lead to a decrease in learned helplessness. It may help combat the passive stance of many students who defer to adults the responsibility of programming their lives and understanding their problems for them. The lingering confusion regarding the nature of their disability must surely impede the emergence of an individual sense of identity and worth (Schneider, 1984).

Recommendations

The findings of this study have generated eight recommendations. While the first five recommendations are concerned with strategies for remediating learning disabilities, the remaining three deal with implications for further research.

1. Learning disabled students should be taught to control their own behavior in an active role and take responsibility for increasing their outcomes. Techniques for developing intrinsic motivation should be stressed so that, given their problems, the students can learn to act upon them independently of others.

2. Students need to become self-sufficient learners by focusing on self-instructional strategies, which provide the means to accomplish their end behaviors.

3. Students should develop more self-control techniques by acquiring decision-making and problem-solving strategies. This self-control is viewed as learned behavior that develops as the students give up external control over their actions and begin to choose, monitor, regulate, and reinforce their own behaviors for their own best interests. Teaching of strategies which establish self-control may fit within the goals developed for the students at the staffing conferences on the Individual Education Plan.

4. The metacognitive approach should include (a) increasing the students' awareness of the task demands, (b) teaching the students to use appropriate strategies to facilitate task completion, and (c) teaching the students to monitor the applications of these strategies.

5. A better understanding of learning disabilities by students should become a long-term interest. Explicit counseling techniques for the learning disabled students should be better developed.

6. Additional research is needed to investigate the subjective perceptions of the learning disabled students in a longitudinal study.

7. Further research should be conducted to determine the extent of students' understanding and acceptance of their disabilities. This should take place prior to the development of an education intervention impacting students' self-concept, learning style, study habits, and the degree to which they facilitate positive teacher-student interaction.

8. It is recommended that research be undertaken to investigate the relationship of the students' knowledge of their educational labels and the attributional process. Further study is needed to

clarify the effect the acceptance of limitations has upon the performance and persistence of learning disabled students.

Student's Name_____

Grade in School_____

Age_____

Male_____

Female_____

Why have you been assigned to this classroom?

How many years have you been in this type of program?

Please read the following sentences carefully and circle the ones that you feel describe you or the type of problems that you have in school.

1. I have problems with reading.
2. I have trouble remembering things that I have just read.
3. Often I do things too fast, without thinking.
4. I have trouble explaining my ideas.
5. I make a lot of careless mistakes.
6. I usually take longer to complete tests than most of the students in the class.
7. I have a hard time concentrating when I read.
8. I have problems understanding tables, graphs, or charts.
9. I have a hard time following directions when I read them.
10. I have a hard time following directions when they are given to me orally.
11. When I read I often come across words that I do not know.
12. When we are given a list of new vocabulary words to learn, they are usually very difficult and I have trouble understanding the meanings.
13. I understand better if I can read aloud.
14. I have a difficult time planning my work.
15. I have problems with spelling.
16. I have problems with math.
17. I cannot sound out new words.
18. I get confused when people tell me to do several things in a row.
19. I would rather listen to a story than read it.
20. I have problems in almost all of my subjects.
21. I am a very slow reader.
22. It is hard for me to keep my mind on my schoolwork.
23. I have trouble remembering things the teacher just said a little while ago.

24. I often say words wrong when I read.

25. When I read I sometimes reverse words or part of a word.

26. I cannot remember what a teacher has written on the board a few minutes after it is erased.

27. When I spell a word I get confused about what endings should go on the word. (s or es, when to change the y to i, etc.)

28. I often leave off the endings of words when I spell.

29. My teachers think that I am lazy.

30. I feel that I talk smarter than I write.

31. If homework were oral, I could do it all.

32. I like to make things with my hands.

33. I cannot remember the directions that my teacher gives in class.

34. I hate school.

35. I have a learning disability.

36. I get mixed up when my teachers talk in long sentences.

37. I get tired of reading before I finish the selection.

38. I get nervous and confused when taking a test and I usually answer questions wrong.

39. I have problems with spelling, grammar, and punctuation while writing papers.

40. When I take notes in class, I tend to write down things which later turn out to be unimportant.

41. After reading several pages of an assignment, I am unable to remember what I have just read.

42. When I take tests I forget names, dates, formulas, and other details that I really do know.

43. I do not always write in complete sentences.

44. I often do not complete assignments.

45. I read everything at the same speed.

46. I would rather print than write in cursive.

47. I often confuse similar sounds, such as sand and send, bet and bit, cashing and catching, etc.

48. I use taped textbooks for all of my classes.

49. I can add.

50. I can subtract.

51. I can multiply.

52. I can divide.

53. I have trouble with fractions and decimals.

54. I often daydream when I am studying.

55. I have problems keeping all my work for each subject together and carefully arranged in some planned order.

56. I have a hard time understanding story problems in math.

57. I waste a lot of time because I am unorganized.

58. I have to read a chapter over many times before I understand it.

59. I have a difficult time putting my ideas down on paper.

60. When I do not know a word I use the other words in that sentence to help me figure out what the word is.

61. I have poor handwriting.

62. I can learn best when a teacher shows me what to do.

63. I understand what my learning disability is.

Did you attend the staffing where your teachers and parents developed your Individual Education Plan? (IEP)

On your IEP what does it say that you have a learning disability in?

What would you label your learning disability?

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